L-2 Gap-Metric-Based Identification Algorithms For Linear Feedback Systems

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Summary

In this paper, we propose two algorithms to identify linear feedback systems. The parameters of the model are obtained to minimize the L-2-gap between the observed true system and the identified model. Frequency-domain direct and indirect identification algorithms are presented and illustrative examples are given.

References:

1. ALAMER S, 2003, 10 IEEE TECHN EXCH M
2. CANTONI M, 2001, 40 C DEC CONTR, P3665
3. DATE P, 1999, C DEC CONTR 1999 PHO, P3230
4. DATE P, 2004, AUTOMATICA, V40, P995
5. ELSAKKARY AK, 1985, IEEE T AUTOMAT CONTR, V30, P240
6. ELSAKKARY AK, 1989, INT J CONTROL, V49, P561
7. ESMAILI A, 2000, J PROCESS CONTR, V10, P525
8. GEORGIOU T, 1991, 30 C DEC CONTR, P2262
9. GEORGIOU T, 1992, AM CONTR C, P307
10. GEORGIOU TT, 1988, SYSTEMS CONTROL LETT, V11, P253
11. GLOVER K, 2000, 38 IEEE C DEC CONTR, P4084
12. GOODWIN C, 1999, AM CONTR C SAN DIEG, P3347
13. KAVRANOGLU D, 2001, IEE P-CONTR THEOR AP, V148, P383
14. LJUNG L, 1999, SYSTEM IDENTIFICATIO
15. QIU L, 1992, IEEE T AUTOMAT CONTR, V37, P741
16. SODERSTROM T, 1989, SYSTEM IDENTIFICATIO
17. SUN LM, 2001, IEEE T AUTOMAT CONTR, V46, P1936
18. VINNICOMBE G, 1993, IEEE T AUTOMAT CONTR, V38, P1371

19. VINNICOMBE G, 2001, UNCERTAINTY FEEDBACK
20. WANG J, 2004, J PROCESS CONTR, V15, P729
21. WANG JD, 2004, J PROCESS CONTR, V14, P555
22. ZAMES G, 1980, P ALL C, P380

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